

InHand Networks

Connect to Innovate,
Compete to Elevate.





Who Are We?

InHand Networks is a leading IoT solutions provider founded in 2001, dedicated to driving digital transformation across industries and empowering customers to unlock their full potential and achieve accelerated growth.

24

Years in the IoT
industry

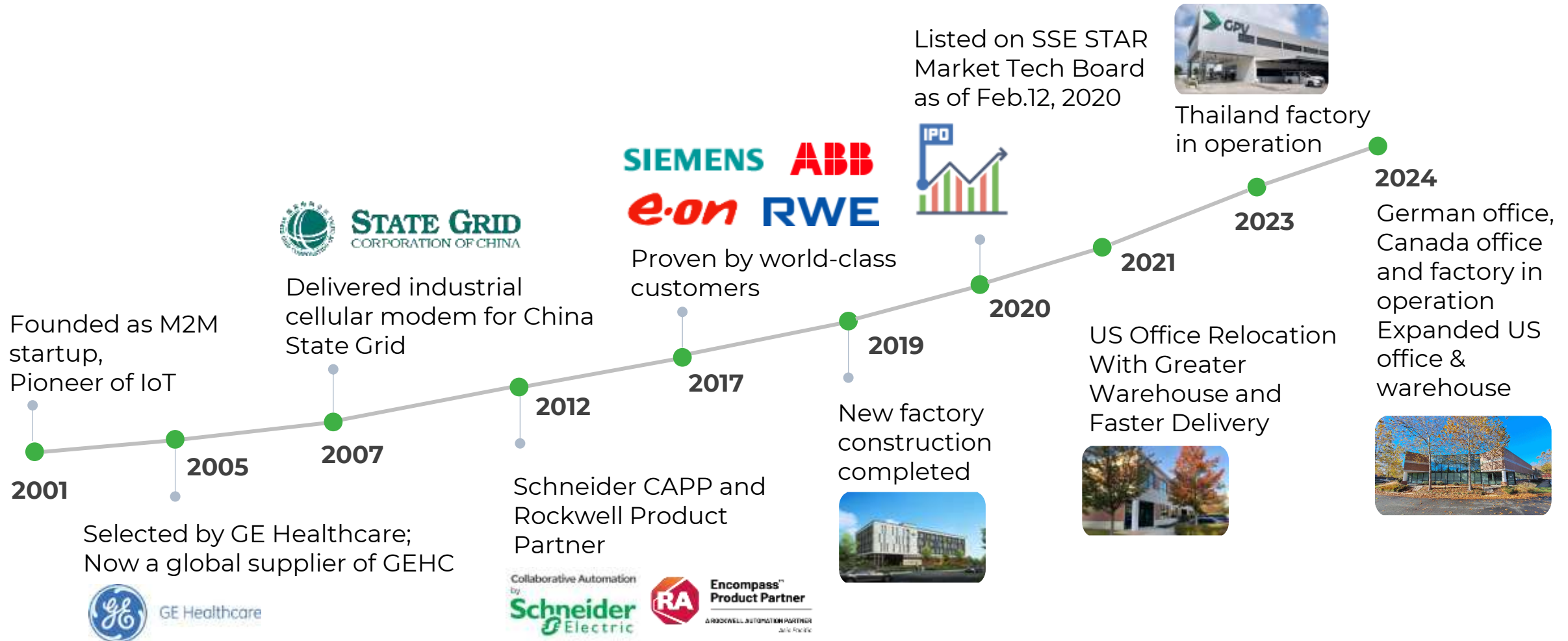
60+

Countries using
our products

3.4+ Million

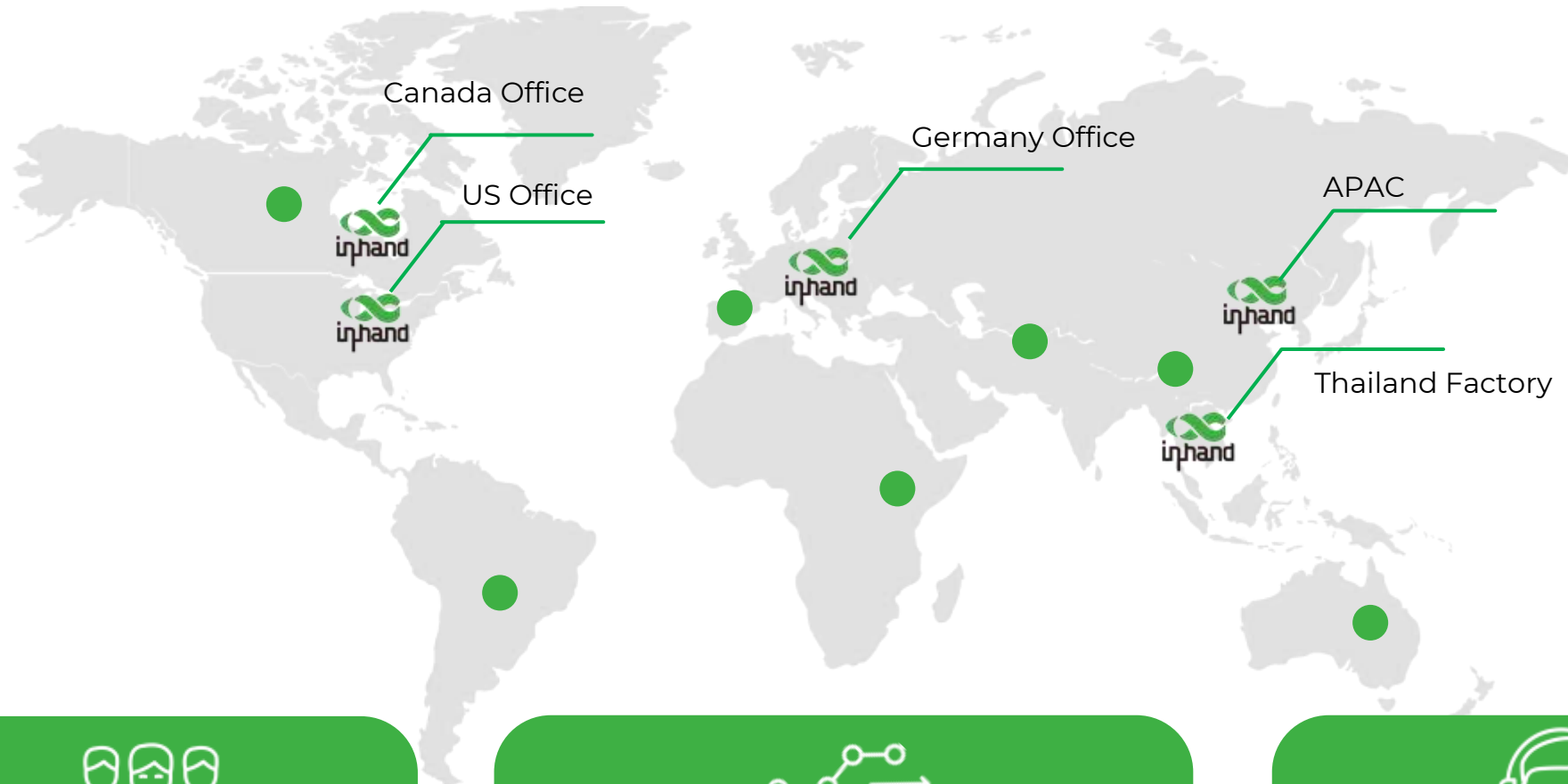
Products deployed
worldwide

Pioneering IoT for 24 Years



*STAR Market is a Nasdaq-style tech board – the Science and Technology Innovation Board at Shanghai Stock Exchange.

Global Coverage



Employees **400+**

R&D Team **140+**



Continued growth,
listed among **Top 10** IoT gateway
vendors by Berg Insight



Free Technical Support
16 Hrs per Day
5 Days per Week

Globally Certified, Globally Recognized



AT&T

verizon



T-Mobile



uscellular



Assessed



qualified device
Internet of things



Five Pillar Industries



Trusted by Partners & Customers



e.on

RWE

nationalgrid



ABB

VIESSMANN

VEOLIA

aquatec

Coca-Cola

pepsi

Wireless
ATM.STORE.COM

Checkpoint

HARMAN
A SAMSUNG COMPANY

SIEMENS

RedSpeed®

sigfox
usa

Products & Services: Independent R&D with Core Technologies

Enterprise Network

InHand Cloud-Managed Networking Solution



InCloud Manager



Enterprise Router



Enterprise AP



Enterprise Switch



5G Outdoor Unit

Plug & Play Internet Connectivity



Device Manager



5G Router



Industrial LTE Router



Portable 4G Router

Products & Services: Independent R&D with Core Technologies

Industrial IoT

Edge Intelligence Solution



DeviceLive



AI Edge Computer



Edge Computer



Edge Gateway

Industrial Router



InConnect



Device Manager



Industrial Router

Industrial Ethernet Switch



Unmanaged Industrial Switch



Managed Industrial Switch

Products & Services: Independent R&D with Core Technologies

Digital Energy



Distribution Power Line Fault Indicator (Overhead)



Distribution Power Line Fault Indicator (Underground)

Products & Services: Independent R&D with Core Technologies

Smart Commerce



Grab & Go AI Vending Cooler System



Grab & Go AI Vending Cooler



Grab & Go AI Smart Kit



AI Vending Cloud



Smart Vending System



Edge Computer



Edge Tablet



InVending Cloud



Smart Merchandiser System



Smart Merchandiser Kit



InFMS Cloud

Products & Services: Independent R&D with Core Technologies

Mobility

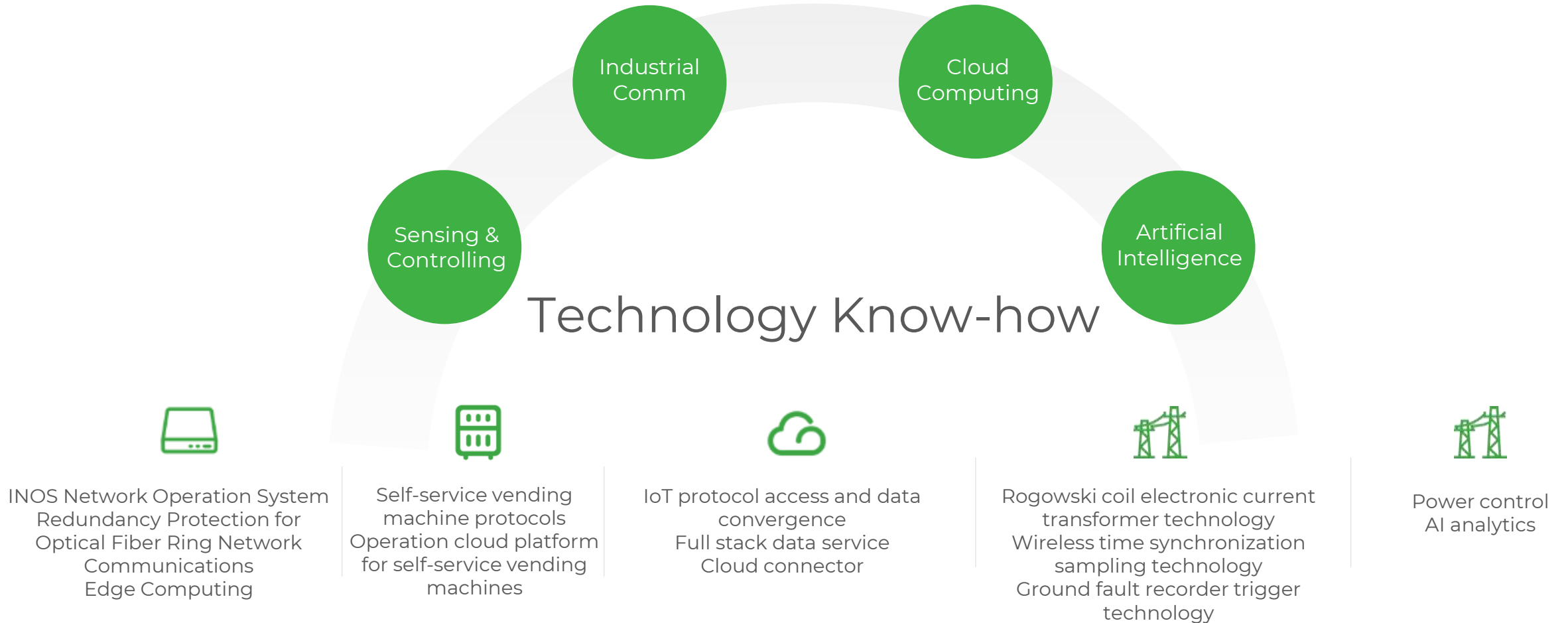


Vehicle Gateway



Vehicle Telematics Gateway

R&D Capabilities: from Edge to AI



Quick Response to Market Demands



YoY increase in the investment in R&D in 2023

11.72%

12.92%
increase in R&D investment in 2022

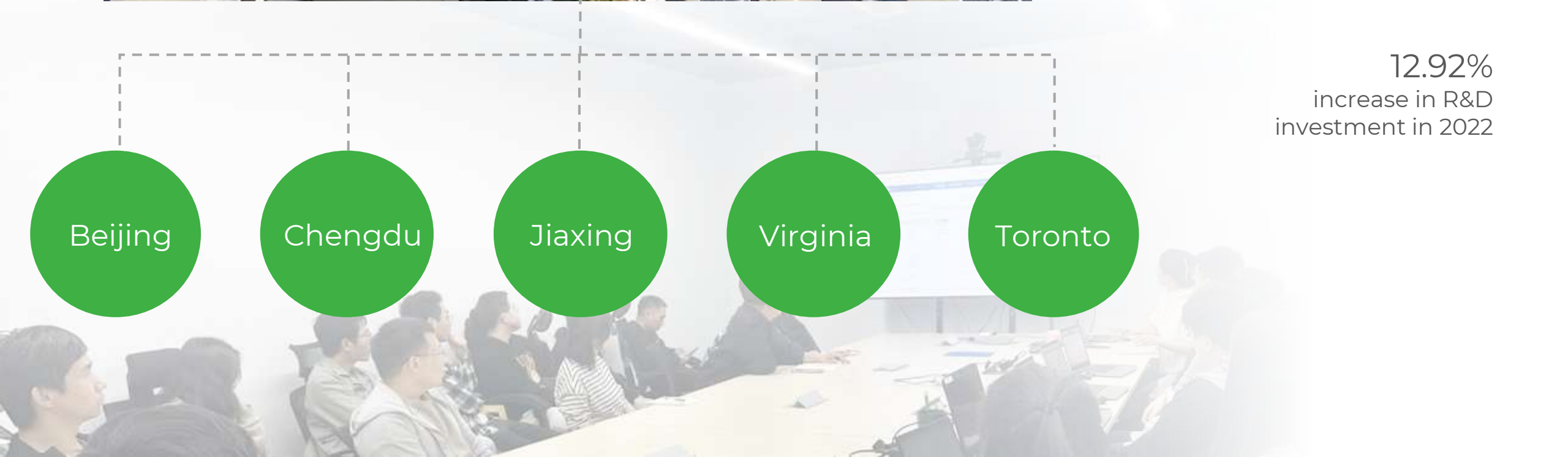
Beijing

Chengdu

Jiaxing

Virginia

Toronto



Supply Chain: Self-owned Factory with Ensured Capacity and Quality



3 Manufacturing centers: Jiaxing (China), Bangkok (Thailand), Toronto (Canada)

9 Production lines with a high level of flexibility

3,000 Units produced per day



17,898 Square meters



Multi-location Inventory & Tech Support

Inventory & Support Centers
Around the Globe



**Reliability
you can count on!**

Toronto
Canada

Virginia
US

Düsseldorf
Germany

Jiaxing
China

Secure Product Development Lifecycle

IEC 		Ref. Certif. No.
		BE-48789
IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)		
Certificate of Conformity – Industrial Cyber Security Capability		
Type	Process Capability Assessment	
Name and address of the applicant	Beijing InHand Networks Technology Co., Ltd. Room 501 5th Floor, Building 3, No.18 Yard, Jiyue Road, Chaoyang District Beijing, China	
Certificate Coverage (including Version)	Product Cyber Security Management Program (1.1)	
Standard	IEC 62443-4-1:2019	
Requirements Assessed	Security management (11.3, 13) Security requirements (5.6, 8) Secure by design (4.5, 6) Secure implementation (2.5, 3) Security verification and validation testing (9, 8, 6) Management of security-related issues (5.6, 8) Security update capabilities (3.3, 8) Security outcomes (7, 3, 7)	
Additional information (if necessary, may also be reported on page 2)	<input type="checkbox"/> Additional information on page 2	
As shown in the Test Report Ref. No. which forms part of this Certificate	Test Report Ref. No.: SHC24079301381	
This Certificate of Conformity, issued by the National Certification Body, certifies that the above have been found to be in conformity with the requirements of the Industrial Cyber Security Capability Scheme (IECEE DD-2081) as it relates to the claims declared by the Applicant.		
SGS Belgium N.V. – Division SGS-CEBEC Riverside Business Park, Bel Internationalsteen 35, Buisson 1303 WOLFFELD, 1078 Belgium		
Issue date: 2024-07-26	Signature: Mark Lammens 	

IEC 		Ref. Certif. No.
		BE-48921
IEC System of Conformity Assessment Schemes for Electrotechnical Equipment and Components (IECEE)		
Certificate of Conformity – Industrial Cyber Security Capability		
Type	Product Capability Assessment	
Name and address of the applicant	Beijing InHand Networks Technology Co., Ltd. Room 501 5th Floor, Building 3, No.18 Yard, Jiyue Road, Chaoyang District Beijing, China	
Certificate Coverage (including Version)	Edge Gateway HW1 / HW24 / HW32 / HW52 V2.3	
Standard	IEC 62443-4-2:2019	
Requirements Assessed	The 3-table represents (Passed requirements, requirements assessed as Not Applicable, Total number of requirements) CEC(A.0.4) Identification and administrative control (14.3.23) User control (12.3, 21) System integrity (4.4, 18) Data confidentiality (3.3, 8) Restricted data flow (2.1, 6) Timely responses to events (2.2, 3) Resource availability (9, 7, 11) Software application (2.2, 3) Embedded devices (4.2, 13) Host device (2.1, 14) Network device (5.2, 23)	
Additional information (if necessary, may also be reported on page 2)	<input type="checkbox"/> Additional information on page 2	
As shown in the Test Report Ref. No. which forms part of this Certificate	Test Report Ref. No.: SHC24079301410	
This Certificate of Conformity, issued by the National Certification Body, certifies that the above have been found to be in conformity with the requirements of the Industrial Cyber Security Capability Scheme (IECEE DD-2081) as it relates to the claims declared by the Applicant.		
SGS Belgium N.V. – Division SGS-CEBEC Riverside Business Park, Bel Internationalsteen 35, Buisson 1303 WOLFFELD, 1078 Belgium		
Issue date: 2024-05-09	Signature: Mark Lammens 	

- IEC 62443-4-1 certificate: Secure product development lifecycle
- IEC 62443-4-2: Secure and reliable solutions for industrial control systems
 - IR302 & IR315 Industrial LTE Router
 - IG502 & IG902 IoT Edge Gateway
 - EC312 Edge Computer

Social Responsibility

Energy Efficiency, Environmental Protection

- Waste sorting in factory, regular recycling and disposal of hazardous solid waste
- Promote public transportation to reduce vehicle emissions
- Remind employees to turn off lights and devices when not in use



Employee Safety and Health in Production

- Protective equipment, regular fire drills, safety days included in KPI management
- Comply with labor laws, insurance coverage, prohibit child labor, prevent forced overtime, and prioritize protection for female workers
- Compliant with ISO 45001:2018 Occupational Health and Safety Management System
- Approved by Schneider RBA social responsibility audit



Green Supply Chain

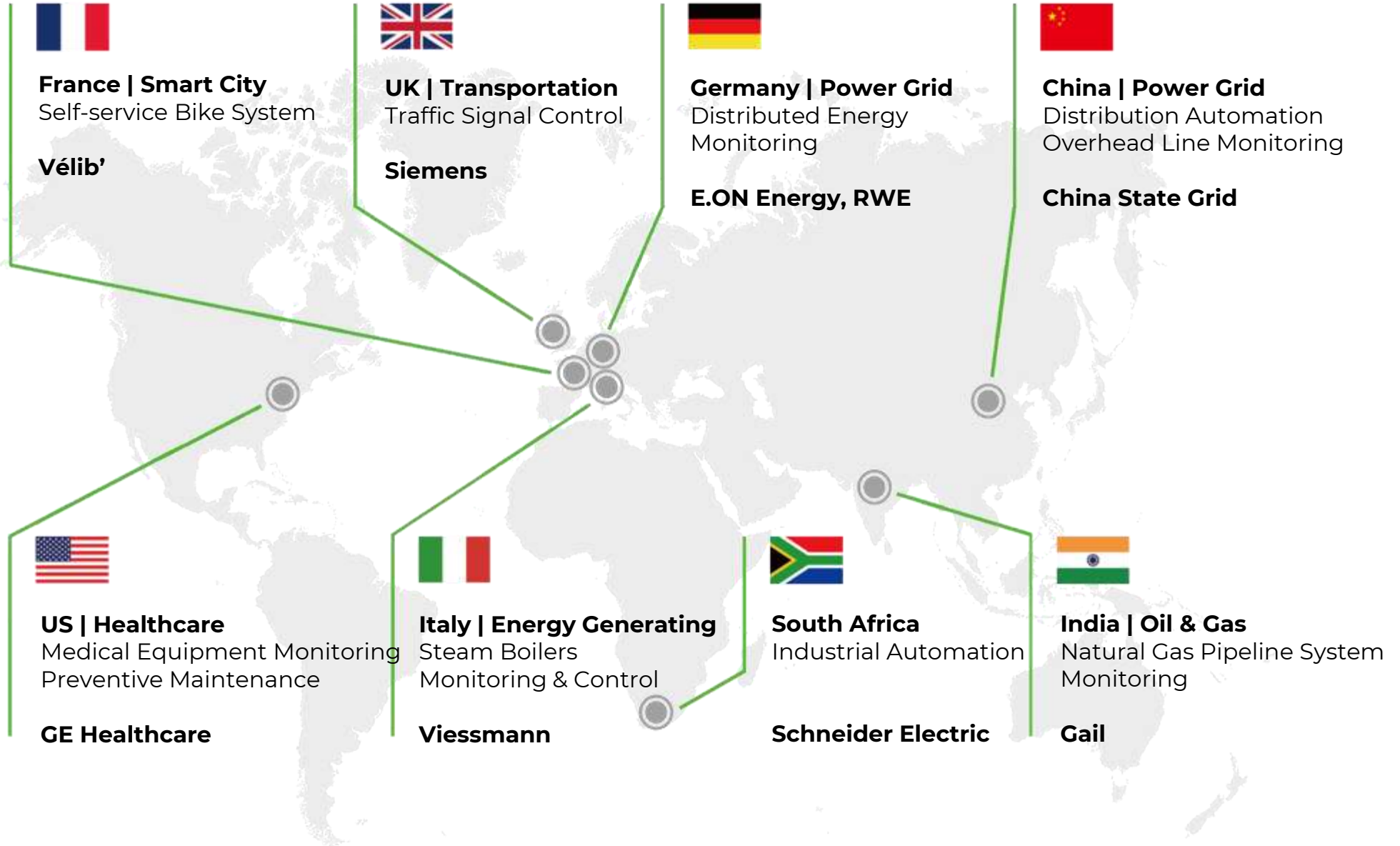
- Purchase only raw materials compliant with RoHS 2.0 and REACH standards, avoid use of conflict minerals
- No toxic or harmful substances maliciously added during production



Applied in a Wide Range of Scenarios



Success Stories



Enterprise Network



InHand Cloud-Managed Networking Solution




Network
Visualization


Application
Insight



InCloud Manager


Software-Defined
WAN


Unified
Management

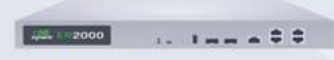

High Performance
Router ER805


Cost-Effective
Router ER605


High Performance
Wi-Fi 6 AP


Cloud Managed
5G FWA


Cloud Managed
EnterpriseSwitch ES600


High-performance
Enterprise-grade ER2000


High Reliable
5G ODU



Hybrid Workplace



Business Branches

Cloud-Managed 5G SD-WAN Edge Router



ER605

For smaller sized branches

- Firewall throughput: 450M bps
- VPN throughput: 100Mbps
- User access volume: 50 to 100
- LTE Cat6
- 5 * Gigabit Ethernet
- Wi-Fi 5, dual-band Gigabit



ER805

For medium-sized branches

- Firewall throughput: 600M bps
- VPN throughput: 200Mbps
- User access volume: 100-150
- 5G/4G
- 5 * Gigabit Ethernet
- Wi-Fi 5, dual-band Gigabit



ER815

For larger sized branches

- Firewall throughput: 1Gbps
- VPN throughput: 300Mbps
- User access volume: 200-300
- NEW 5G R16
- 3000Mbps Dual-band WiFi6
- Ports: 1*2.5 GbE RJ45, 4*GbE RJ45
- eSIM+2*Nano SIM

Enterprise-grade SD-WAN Router



ER2000

Central Endpoint Access
Medium-sized Branch Access



High Performance

6Gbps Firewall
Throughput
1.5Gbps VPN
Throughput



10 Gigabit Connection

WAN: 1*10G SFP+, 1* GbE SFP,
2*GbE RJ45
LAN: 2*10G SFP+, 2*Combo,
8*GbE RJ45



One-Click SD-WAN Networking

Hub-spoke Networking



Highly Reliable Security

Firewall, Domain
Filtering
Blacklist/ Whitelist
Filtering
Network Access
Control



Visualization

Network Topology
Connectivity/Cellular
Signal/Traffic Statistics

AC

AP Controller

SSID Templates
Portal Authentication



Cloud Management

Simplify Complexity
Fully Cloud-managed



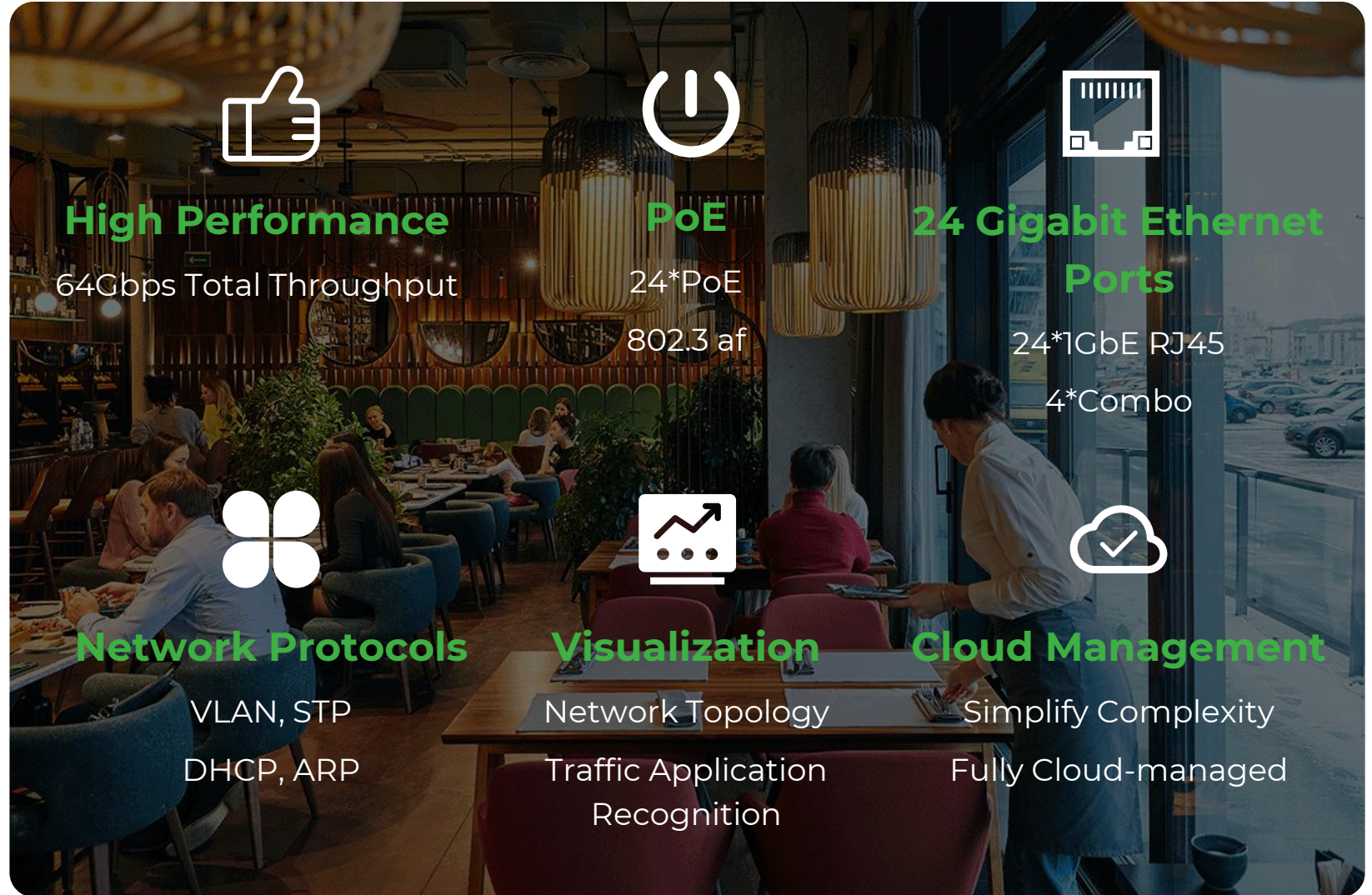
Traffic Analysis

Traffic Application
Identification and
Management

Enterprise-grade Switch



ES620

A background image of a restaurant interior with people dining. Overlaid on this are several icons and text blocks representing network features.

- High Performance** (Thumbs up icon): 64Gbps Total Throughput
- PoE** (Power button icon): 24*PoE, 802.3 af
- 24 Gigabit Ethernet Ports** (Ethernet port icon): 24*1GbE RJ45, 4*Combo
- Network Protocols** (Four-leaf clover icon): VLAN, STP, DHCP, ARP
- Visualization** (Bar chart icon): Network Topology, Traffic Application Recognition
- Cloud Management** (Cloud with checkmark icon): Simplify Complexity, Fully Cloud-managed

5G Outdoor Unit

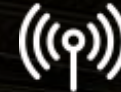


ODU2002



High Performance 5G/4G

DL: 4.76Gbps, UL:
1.25Gbps



Omnidirectional Antenna

6 external 5G cellular antenna
design



Networking Capacity

Throughput: 2 Gbps
Number of access users:
200



Built for Harsh Environments

IP67, -30 ~ 70°C, die-
casting aluminum shell,
GPS



2.5G Gigabit Ethernet

WAN/LAN , support PoE
power receiving



Wall-/ Pole- mounted

Adjustable installation angle



High Security

Firewall, DOS attack
prevention, remote access
control



Cloud Management

Simplified and
completely cloud-
based management

Applications



Portable 4G Router



CR202-Lite

- ARM + Linux
- TI AM6231, single core Cortex-A53@0.8/1.4GHz
- 2*ETH port, 2*serial port, CAN/ IO/ 4-20mA/ RS232 /RS485, flexible expansion
- Scalable LTE/ Wi-Fi/ Bluetooth/ GPS
- Robust security mechanism: SecureBoot TPM2.0



CR202

- 5000mAh Li-on battery ensures portability
- Uninterrupted CAT6/CAT4 connectivity
- Dual SIM failover, eSIM
- Wi-Fi supports 30 devices
- 2 ETH for Inline WAN failover

5G Cellular Router for Business Internet



FWA02

- High-speed 5G, DL 4.76Gbps, UL 1.25Gbps, SA/NSA
- 2.4G/5G Wi-Fi, 4*4 MIMO
- 5G/wired backup, cellular link failover
- Quick failover among multiple WANs, dual SIMs and WAN/LAN port
- 6*external 5G antennas, built-in 4 Wi-Fi antennas



FWA12

COMING SOON

- 5G NR R16, DL 7.01Gbps, UL 2.5Gbps, SA/NSA
- Wi-Fi 6: 802.11 ax, tri-radio: AX4200
- 10G WAN/LAN, 2.5G LAN
- Built-in 6500mAh battery
- Cloud management
- Easy to deploy and install

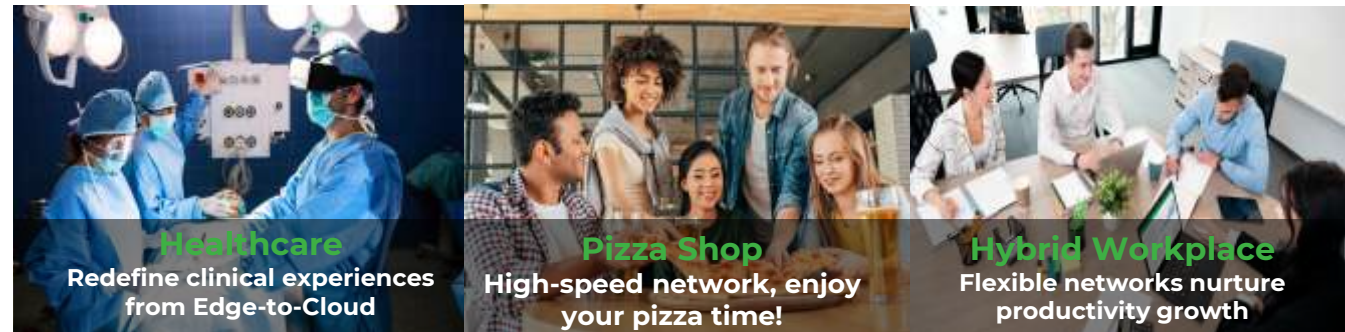
InDoor 5G CPE02



Instant 5G Connectivity Starts Here

5G CPE02

- 5G NR R16
- 4.67Gbps download
- Wi-Fi 6 AX5400
- 1*Nano SIM+1*eSIM
- Single model supports VzW, ATT, TMO
- Cloud Manager



CR602-Lite Portable 5G Router

COMING SOON



Stay Connected Anywhere

Portable 5G Router CR602

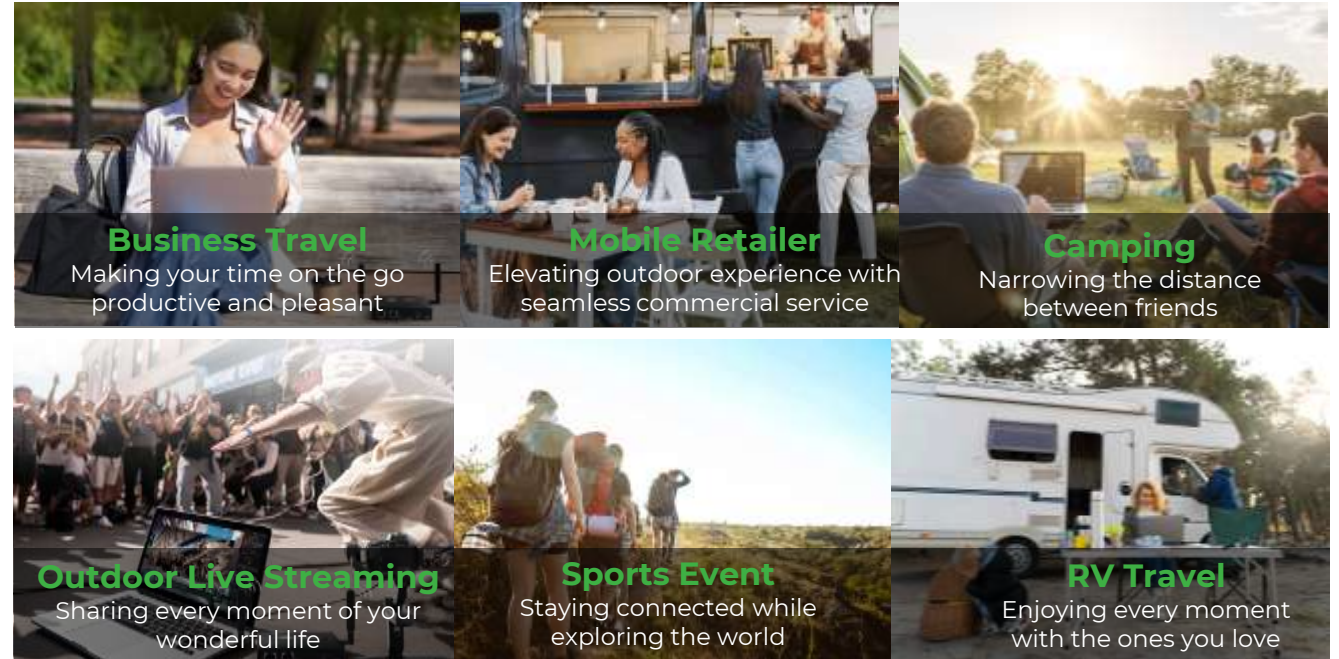
• 5G/CAT12

• Wi-Fi 6 AX1800

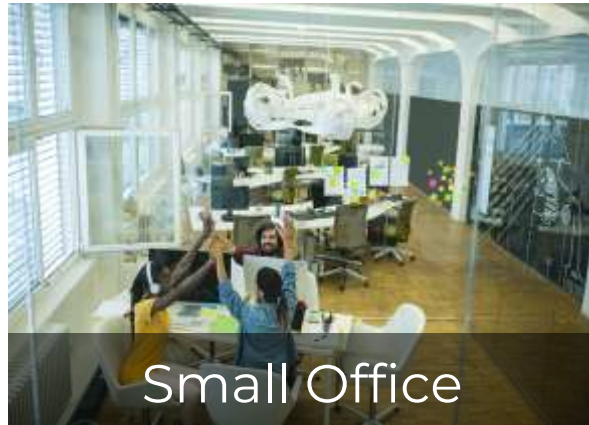
• 1Gbps WAN/LAN

• Built-in battery

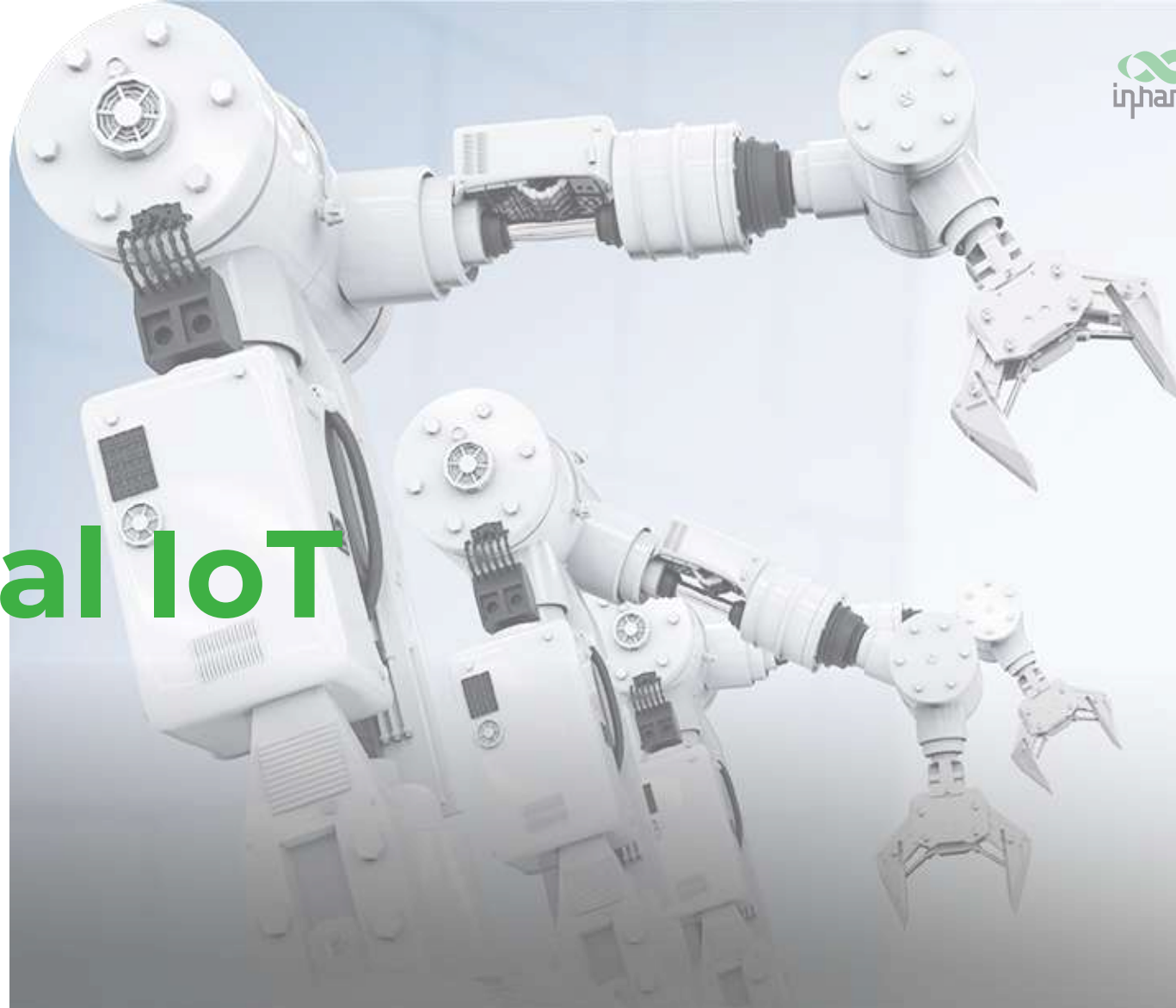
• Cloud-Managed



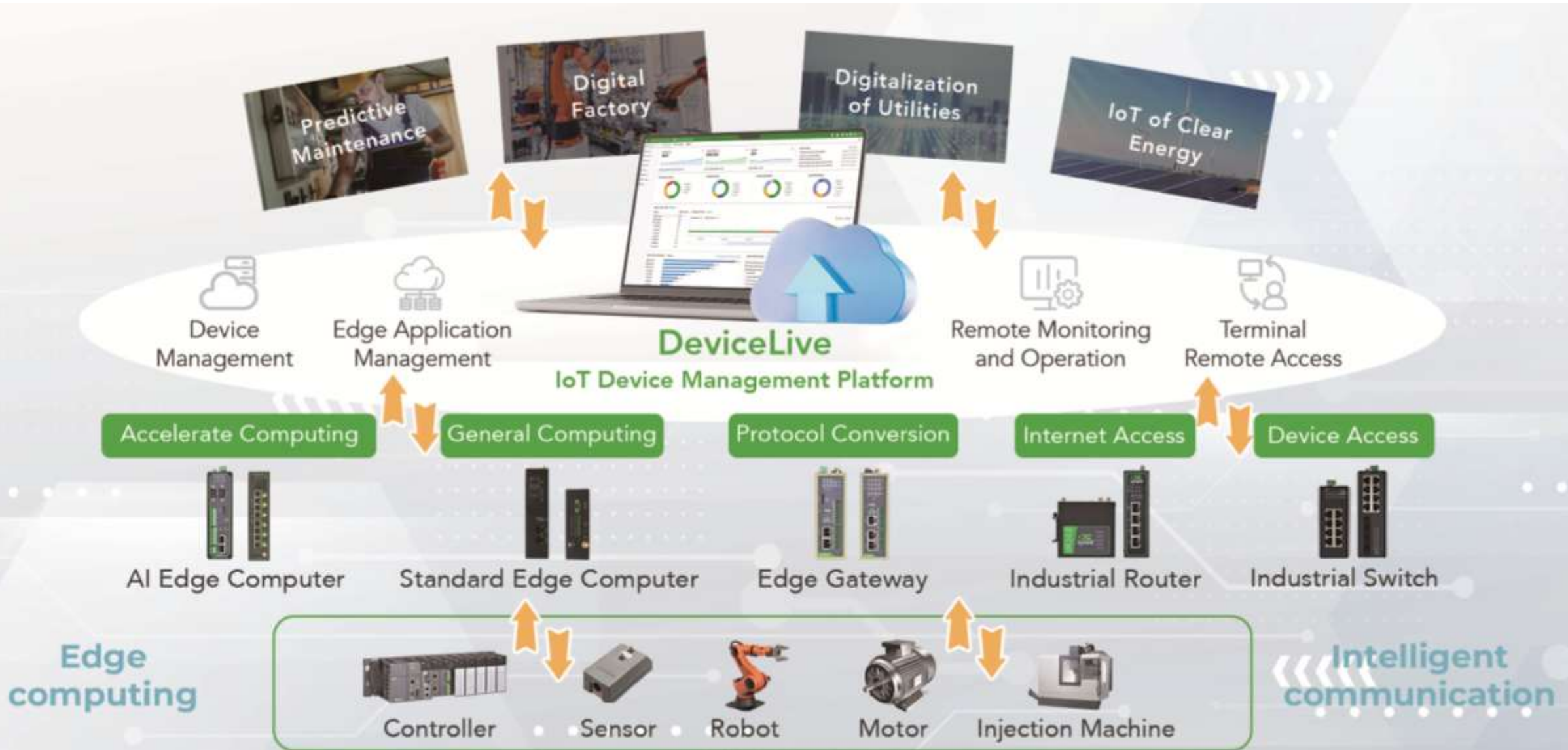
Applications



Industrial IoT



Edge Intelligence Solution



Standard Edge Computer



EC312

- ARM + Linux
- TI AM6231, single core Cortex-A53@0.8/1.4GHz
- 2*ETH port, 2*serial port, CAN/ IO/ 4-20mA/ RS232 /RS485, flexible expansion
- Scalable LTE/ Wi-Fi/ Bluetooth/ GPS
- Robust security mechanism: SecureBoot TPM2.0



InBOX730

- ARM hexa-core processor
- 4G, 2*Gigabit ETH, Wi-Fi, Bluetooth
- HDMI, up to 4K display
- 4*RS232, 2*RS485, 5*USB, CAN, GPIO, MIC, SPK
- Android/Linux
- -20°C~70°C operating temperature
- EMC Level3

AI Edge Computer



EC942

- ARM + Linux
- RK3568, 4-core Cortex-A55@2.0GHz
- Lightweight AI: 1.0 TOPS
- 2*ETH ports, 2*serial, 1*CAN, 4*DI, 4*DO, 1*HDMI
- Cellular (5G/LTE)/ Wi-Fi/ Bluetooth /GPS



EC954

- ARM + Linux
- RK3568, 4-core Cortex-A55@2.0GHz
- Integrated 1.0 TOPS computing power, expansion up to 26TOPS
- 4*ETH ports, 8*serials, 2*CAN, 4*DI, 4*DO, 1*HDMI
- Cellular (5G/LTE)/ Wi-Fi/ Bluetooth/ GPS



Edge AI Inference Computer



EC3320

- RK3588: 8-core CPU - 4 Cortex-A76 and 4 Cortex-A55, up to 2.6 GHz.
- 4GB SDRAM + 16GB eMMC.
- 6.0 TOPS AI computing, expansion 26 TOPS
- 1 Ethernet port, 3 serial ports, 2 HDMI
- DSA data acquisition from various industrial protocols
- LTE, Wi-Fi, Bluetooth
- Secure Boot, TPM2.0



EC5300/ EC5500

- NVIDIA Jetson Orin Nano, 40 TOPS; NVIDIA Jetson Orin NX, 100 TOPS
- 1*M.2 B-Key/ E-Key/ M-Key (128GB built-in)
- 6*USB 3.2, 2*RJ-45 GbE Ports
- Wide Power Input Range: 9 to 36 VDC
- Operating temperature: -20°C ~ +60°C
- Fanless Design
- Cellular (5G/LTE)/ Wi-Fi/ Bluetooth/ GPS
- Security: Secure Boot, TPM2.0

Edge AI Inference Computer



EC5330

- NVIDIA Jetson Orin Nano, 20 TOPS
- 1*M.2 B-Key/ E-Key/ M-Key (128GB built-in)
- 6*USB 3.2, 2*RJ-45 GbE, PSE
- Wide Power Input Range: 9 to 36 VDC
- Operating temperature: -20°C ~ +60°C
- Fanless Design
- Cellular (5G/LTE)/ Wi-Fi/ Bluetooth/ GPS
- Security: Secure Boot, TPM2.0
- InHand DeviceLive remote cloud management



EC5530

- NVIDIA Jetson Orin NX, 70 TOPS
- 1*M.2 B-Key/ E-Key/ M-Key (128GB built-in)
- 6*USB 3.2, 2*RJ-45 GbE, PSE
- Wide Power Input Range: 9 to 36 VDC
- Operating temperature: -20°C ~ +60°C
- Fanless Design
- Cellular (5G/LTE)/ Wi-Fi/ Bluetooth/ GPS
- Security: Secure Boot, TPM2.0
- InHand DeviceLive remote cloud management

Three OS Options

“Pure Linux OS”

➤ Glossary

- Debian OS without InHand application.

➤ InHand Service

- System image burn in factory.

“InHand IEOS”

➤ Glossary

- Debian OS with InHand application.

➤ InHand Service

- System image update service.
- InHand application services (Cellular, DeviceLive Management, DeviceSupervisor Agent, Network services (VPN, Firewall, etc.)).

Yocto build system

➤ Glossary

- Build your own OS with Yocto .

➤ InHand Service

- System image burn in factory.

ARM-based Industrial Computer



InBOX710

- ARM Dual-core Cortex-A72 & Quad-core Cortex-A53
- 4G, Gigabit Ethernet, Wi-Fi
- HDMI, up to 4K Display
- Extensive Interfaces: RS-485, 3*USB
- Android 7.1 /Linux



InBOX720

- ARM Dual-core Cortex-A72 & Quad-core Cortex-A53
- 5G/4G, Gigabit Ethernet, Wi-Fi
- HDMI, up to 4K display
- Extensive Interfaces: CAN bus, RS232, RS485, GPIO, 7*USB, 1*Type C
- Android 7.1 /Linux



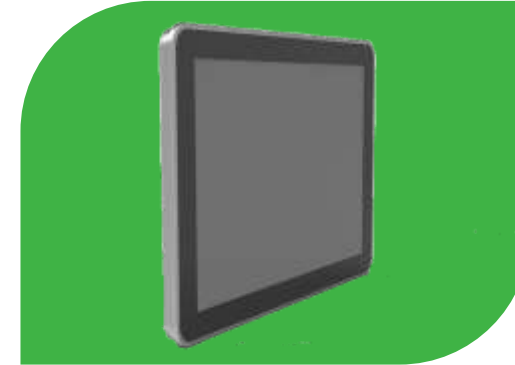
ARM-based Android Tablet



InPAD070S

7" Industrial Tablet

- ARM dual-core Cortex-A17
- 4G, Ethernet, Wi-Fi
- Interactive touchscreen
- Interfaces: RS232, RS485, USB
- IP65-rated screen



InPAD3101

10.1" Industrial Tablet

- ARM quad-core Cortex-A17
- 4G, Ethernet, Wi-Fi
- Interactive touchscreen
- Interfaces: RS232, RS485, USB
- IP65-rated screen

Edge Gateway



- Easy configuration for data acquisition
- Support for 80+ industrial protocols: Modbus TCP/RTU, EtherNet/IP, OPC UA, ISO on TCP, etc.
- Support for major IoT clouds: AWS, Azure, etc.
- Python programmable
- RS232, RS485, IO, ETH, USB, GPS, Wi-Fi



- Easy configuration for data acquisition
- Support for 80+ industrial protocols: Modbus TCP/RTU, EtherNet/IP, OPC UA, ISO on TCP, etc.
- Support for major IoT clouds: AWS, Azure, etc.
- Python and Docker programmable
- RS232, RS485, IO, ETH, USB, GPS, Wi-Fi



Industrial Router

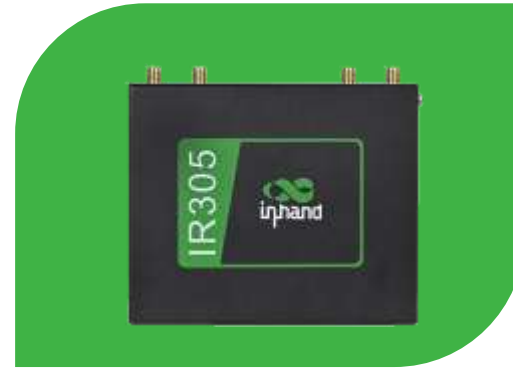
IEC 62443



IR302

For smaller sized branches

- Firewall throughput: 450M bps
- VPN throughput: 100Mbps
- User access volume: 50 to 100
- LTE Cat6
- 5 * Gigabit Ethernet
- Wi-Fi 5, dual-band Gigabit



IR305

- 4G
- 2*Nano SIM
- 5*100Mbps ETH
- 2.4GHz Wi-Fi
- 1*RS232, 1*RS485
- 4*DIO (DI/DO configurable)
- GNSS



IEC 62443



IR315

- 4G
- 2*Nano SIM
- 5*100Mbps ETH
- 2.4GHz Wi-Fi
- RS232, RS485
- IO



Industrial Router



IR615-S

- 4G
- 2*Mini SIM
- 5*100Mbps ETH
- 2.4GHz Wi-Fi
- 1*RS232, 1*RS485



IR624

- 5G/4G
- 2*Nano SIM
- 4*1000Mbps ETH
- 2.4GHz/5GHz Wi-Fi
- RS232, RS485
- 1*DI
- GNSS



IR900

- 4G
- 2*Mini SIM
- 2 or 5*100Mbps ETH
- 2.4GHz Wi-Fi
- 1*RS232, 1*RS485
- 1*DI
- GNSS

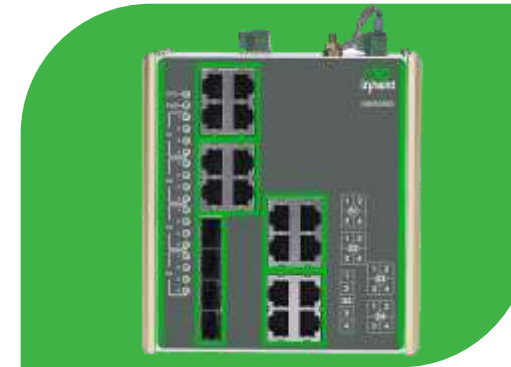


Industrial Switch



ISE Unmanaged

- EMC level 3, -40°C~+75°C
- Rich interfaces for choice
- Compact size
- Easy management



ISM Managed

- Advanced ring topology
- EMC level up to 4
- Simplified deployment & management
- Comprehensive security
- DIN-rail/rack mounting

Cellular Modem

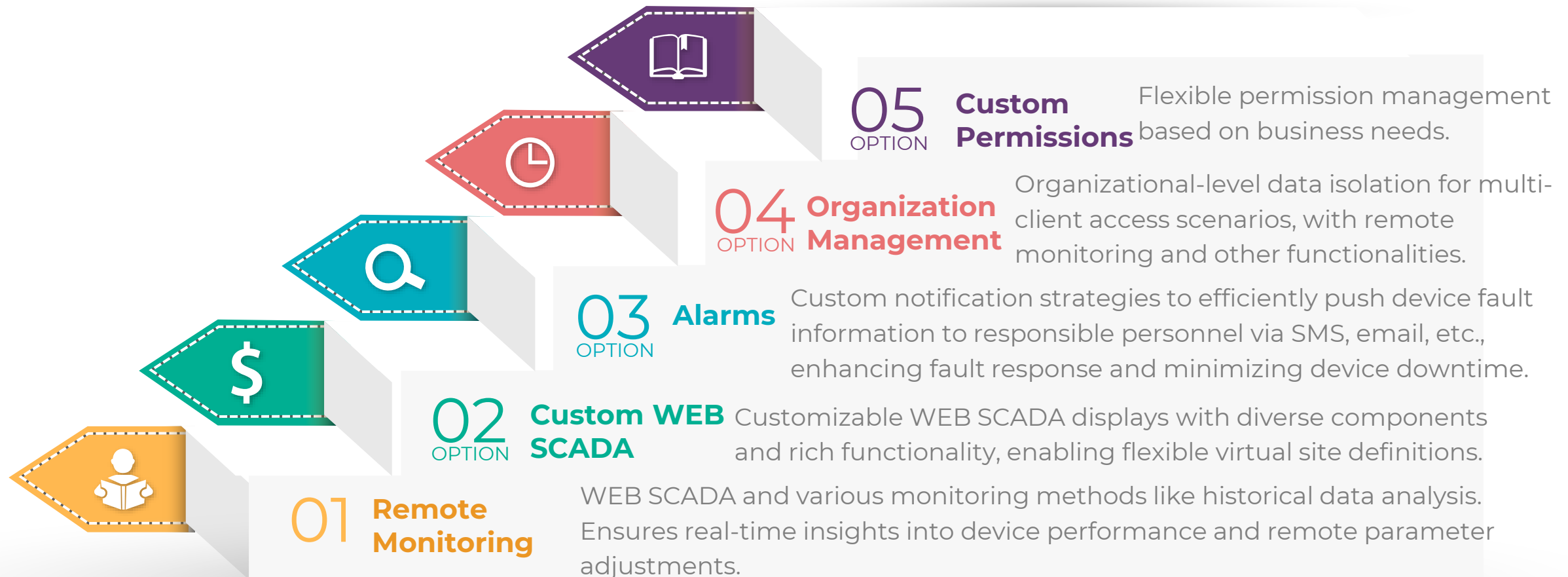


InDTU324

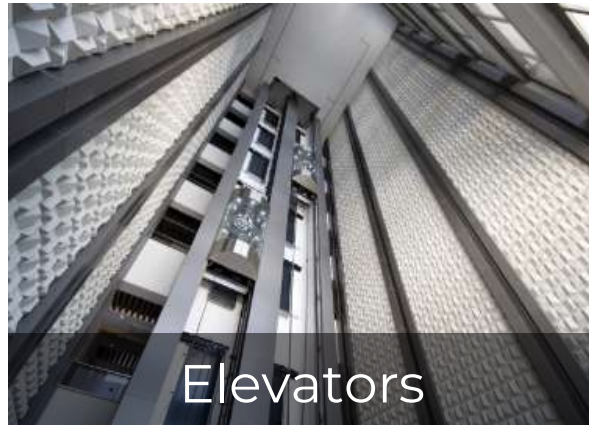
- LTE CAT4/CAT M1/NB-IoT
- Protocol Conversion: IEC 101/104, Modbus RTU/TCP
- AT Command Supported
- Compact Size
- Industrial Design: -40°C ~ +70°C
- Remote Management



A cloud-based remote device monitoring SaaS service on AWS for device manufacturers and system integrators, which aims to enhance operations, cut maintenance costs, optimize processes, and drive digital transformation.



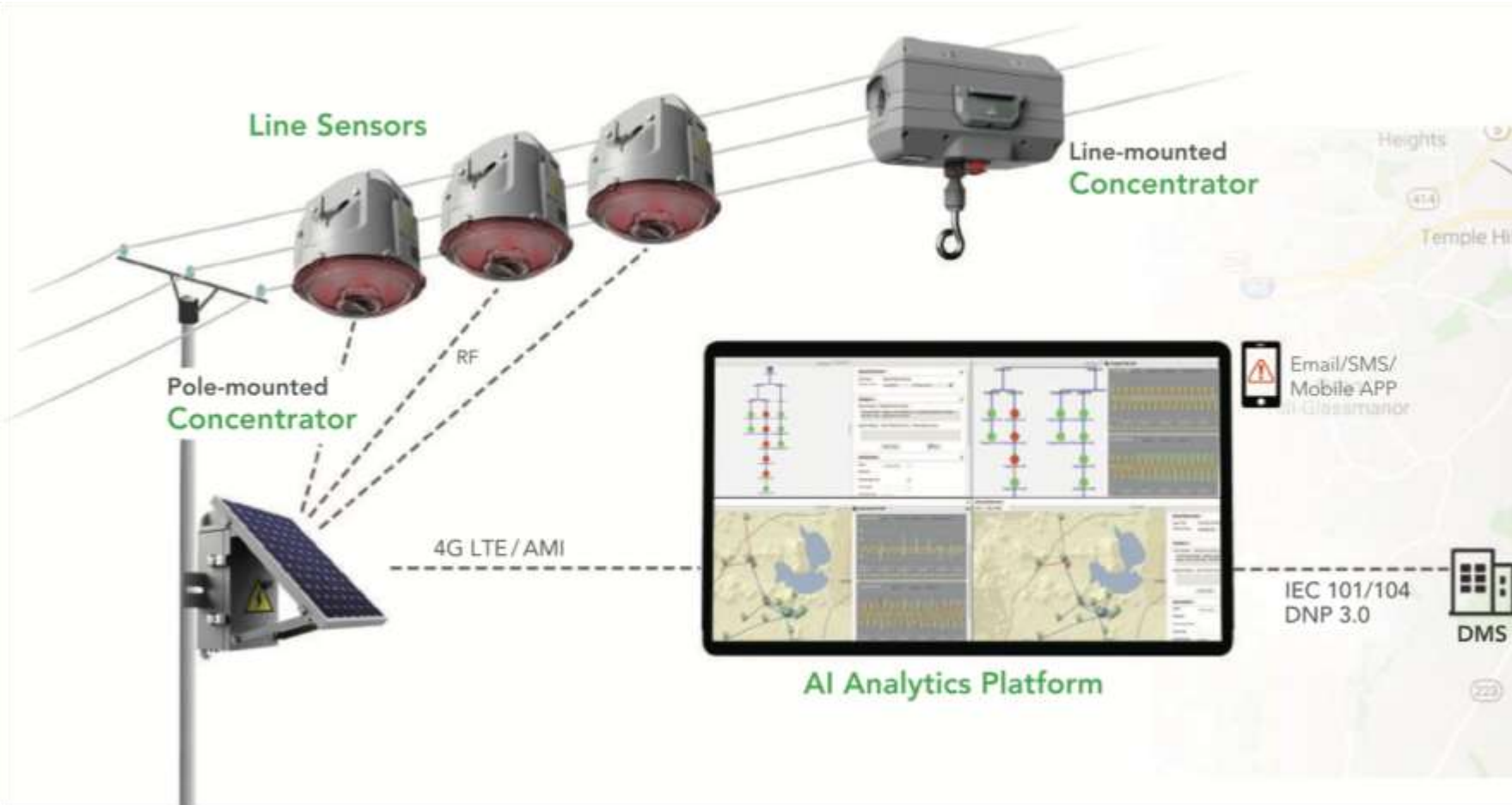
Applications



Digital Energy



Distribution Line Fault Indicator



300,000+

Line Sensors Deployed

20,000+

Power Lines Covered

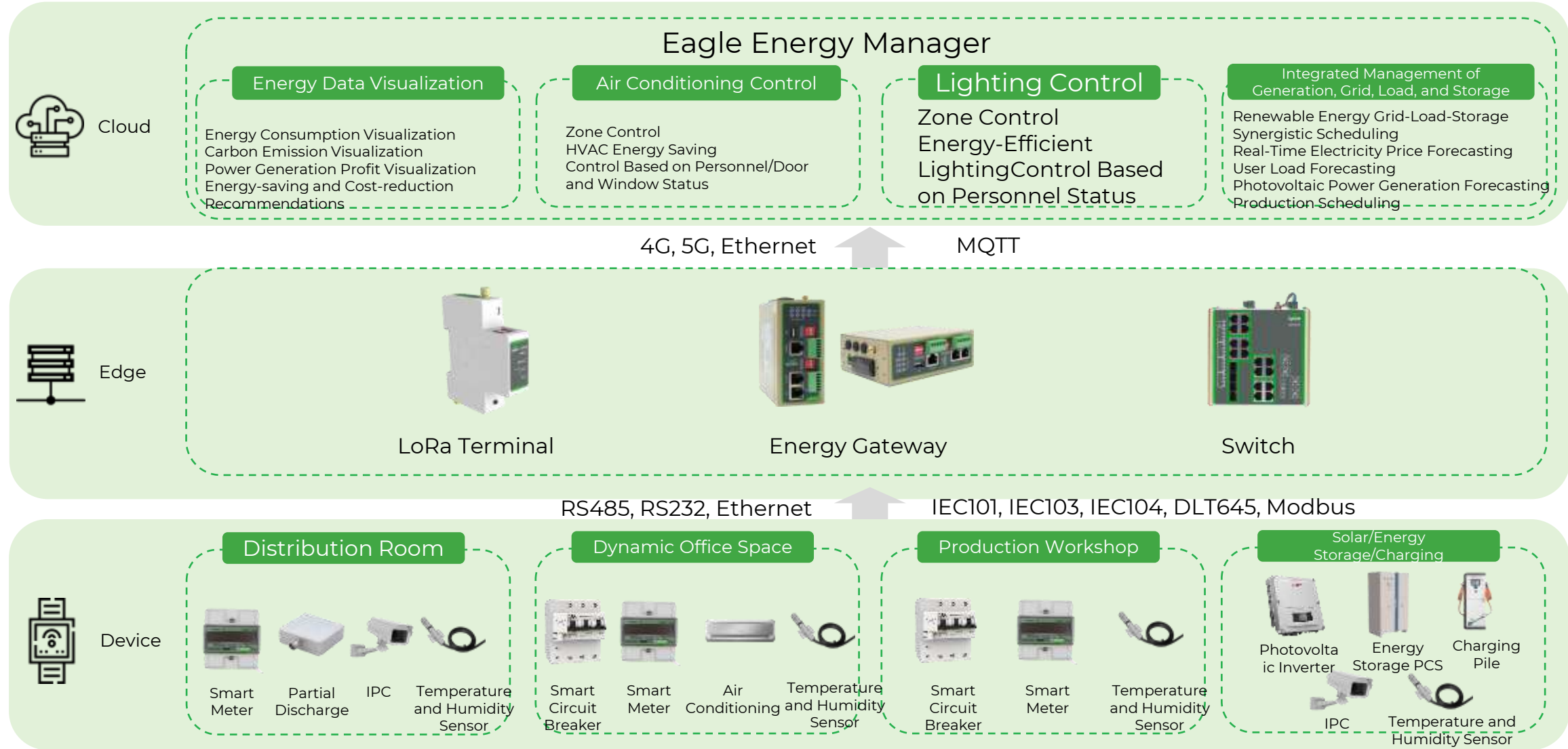
100 Million+

Power Line Events & Waveform Data

72,000+

Line Faults Detected

Real-time Energy Management Solution



Applications



Smart Commerce



AI Vending Cooler System



- Accurate settlements enabled by AI vision recognition
- Consistent reliability safeguards your transaction
- Streamlined operations with a feature-rich platform
- Real-time, high computing power edge recognition with zero delay (coming soon)

Smart Vending System



Third-party platform

4G/Wi-Fi



InVending Cloud

4G/Wi-Fi

Smart vending machines

AI-enabled smart vending machines

Smart retrofit of coffee machines




InBOX700





InPAD070S/3101





InPAD101S-CF

 Touch screen selection

 mobile payment

 Platform management

 Inventory replenishment management

 Configure the machine remotely

Smart Merchandiser System



- Elevate management intelligence with the Smart Merchandiser Platform
- Mobile app for anytime, anywhere remote management
- Dependable intelligent temperature control ensures uninterrupted online services
- Real-time visual technology-based layout data for remote oversight

Mobility



5G Vehicle Gateway



VG710

- 5G/4G, Wi-Fi 5, GNSS
- 4*Gigabit ETH RJ45
- CAN bus, I/O, RS232, RS485, Audio/Voice
- C/C++, Python, Docker
- AWS, Azure



ECE-R10 ECE-R118

EN50155 EN50121-3-2 EN61373

EN45545-2



VG710-M

- 5G/4G, Wi-Fi 5, GNSS
- 4*Gigabit ETH M12
- CAN bus, I/O, RS232, RS485, Audio/Voice
- C/C++, Python, Docker
- AWS, Azure



ECE-R10 ECE-R118

EN50155 EN50121-3-2 EN61373

EN45545-2



VG814

- 5G/4G, Wi-Fi 5, GNSS
- 4*Gigabit ETH (M12), antennas (FARKA/TNC)
- CAN bus, I/O, RS232, RS485, Audio/Voice
- C/C++, Python, Docker
- AWS, Azure



ECE-R10 ECE-R118

EN50155 EN50121-3-2 EN61373

EN45545-2

Vehicle Telematics Gateway



VT200

- LTE CAT1/CAT M1
- Dual CAN bus, RS232, I/O, J1708/RS485
- Modbus, TCP, UDP, MQTT
- AWS, Azure

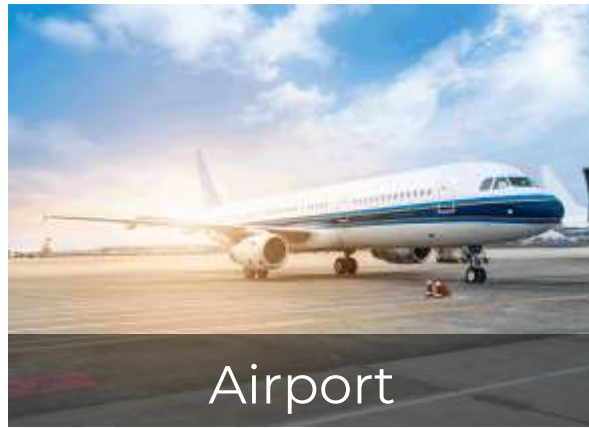


VT300

- LTE CAT1/CAT M1
- Dual CAN bus, RS232, I/O, J1708/RS485
- Modbus, TCP, UDP, MQTT
- AWS, Azure



Applications



Remote Device Management for IoT

✔ Remote Management

✔ Device Monitoring & Debugging

✔ Mobile APP

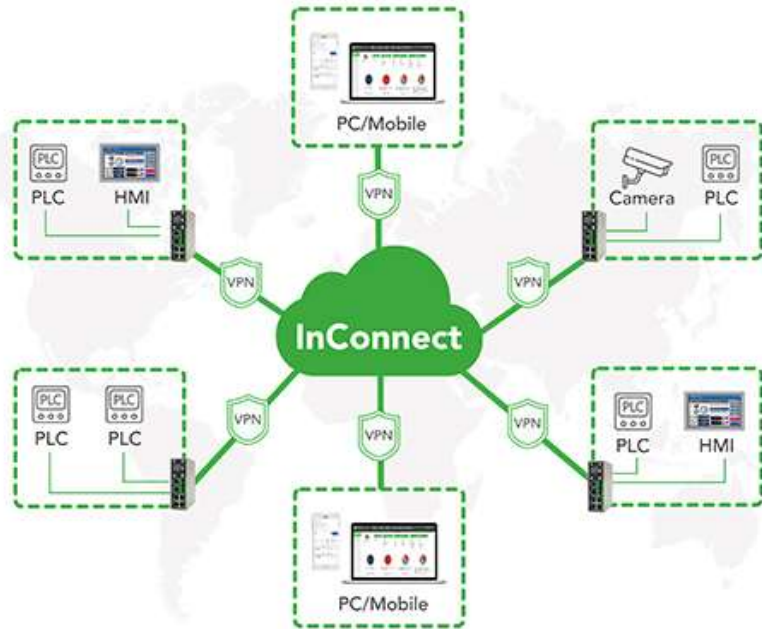
✔ Simple & Efficient for lo

InHand *Device Manager* Cloud

Manage, configure and control your InHand devices



Remote Access Service



- InConnect is a simple service which builds secure remote networks for your IoT applications
- It allows you to connect to remote sites via PC/Phone 24/7
- Debug, program or upgrade PLC/HMI/IPC remotely with reduced onsite visits



InHand Networks

Connect to Innovate,
Compete to Elevate.

